

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

of 2

## Complete if Known

Application Number	10/608,811
Filing Date	June 26, 2003
First Named Inventor	Eran Steinberg
Art Unit	2621
Examiner Name	
Attorney Docket Number	2100874-991240

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.56(a) and 37 C.F.R. § 1.97, Applicant(s) hereby make of record the references listed on the accompanying Form SB/08a, SB/08b for consideration by the Examiner in connection with the examination of the above-identified patent application.

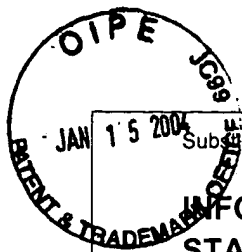
This Information Disclosure Statement:

- (a) ☐ accompanies a new patent application submitted herewith.
- (b) ☒ is filed within three (3) months of the Filing Date or before the mailing date of a First Office Action on the merits; **OR**
- (c) ☐ is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned prior to the mailing date of either a final rejection or a notice of allowance, and is accompanied by either the fee (\$180) set forth in 37 CFR § 1.17(p) or a certification as specified in 37 CFR § 1.97(e), as checked below **OR**
- (d) ☐ is filed after the mailing date of either a final rejection or a notice of allowance, and the issue fee has not been paid, and is accompanied by the requisite petition fee (\$130) set forth in 37 CFR § 1.17(l)(1) and a certification as specified in 37 CFR § 1.97(e), as checked below.  
This document is to be considered as a petition requesting consideration of the information disclosure statement.

As required under § 1.97(e), Applicants, through the undersigned, hereby state either that [check the appropriate space]:

- (e) ☐ Each item of information contained in the Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing date of the Information Disclosure Statement; or
- (f) ☐ No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

It is respectfully requested that each of the references shown on the attached PTO/SB/08a and PTO/SB/08b be made of record in this application. A copy of each of the references are enclosed.



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**INFORMATION DISCLOSURE  
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Each item of information listed in the attached FORM PTO/SB/08a, and FORM PTO/SB/08b may be material to the examination of the above-identified application and is, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR 1.56, 1.97 and 1.98. The Examiner is requested to make these items of official record in this application.

This Information Disclosure Statement under 37 CFR 1.56, 1.97 and 1.98 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these items constitutes prior art.

If this statement crosses in the mail with an office action, or is otherwise not in the indicated category of 37 C.F.R. 1.97, it is respectfully requested that this statement be treated in the next appropriate category and made of record. To the extent required, please treat this submission as a conditional petition for acceptance of the information disclosure statement.

The Commissioner is authorized to charge any deficiencies and credit any overpayment of fees to our Deposit Account No. 07-1896

Respectfully submitted,

Date:

1-12-04

GRAY CARY WARE &amp; FREIDENRICH LLP

By: Andrew V. Smith

Reg. No. 43,132

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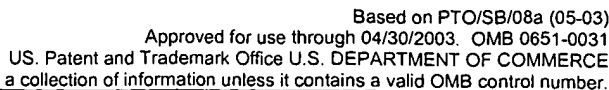
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Attorney Docket Number	2100874-991240
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First Named Inventor	Eran Steinberg
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Art Unit	2621
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Examiner Name

[illegible]

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	✓	JP 5-260360 (includes English Abstract)	10-08-1993	Shinichi		
	✓	EP 1 128 316 A1	08-29-2001	Ray		
	✓	GB 2 370 438 A	06-26-2002	Cheatle		
	✓	WO 02/052835 A2	07-04-2002	Cheatle		

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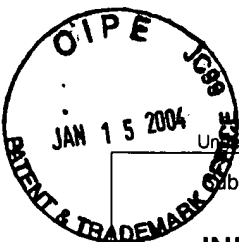
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		P. VUYLSTEKE, et al., Range Image Acquisition with a Single Binary-Encoded Light Pattern, IEEE Transactions on Pattern Analysis and Machine Intelligence, abstract printed from <a href="http://csdl.computer.org/comp/trans/tp/1990/02/i0148abs.htm">http://csdl.computer.org/comp/trans/tp/1990/02/i0148abs.htm</a> , 1990, 1 page	
		D. SHOCK, et al., Comparison of Rural Remote Site Production of Digital Images Employing a Film Digitizer or a Computed Radiography (CR) System, 4th International Conference on Image Management and Communication (IMAC '95), August 21-24, 1995, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/imac/1995/7560/00/75600071abs.htm">http://csdl.computer.org/comp/proceedings/imac/1995/7560/00/75600071abs.htm</a>	
		J.W. SUBLETT, et al., Design and Implementation of a Digital Teleultrasound System for Real-Time Remote Diagnosis, Eight Annual IEEE Symposium on Computer-Based Medical Systems (CBMS '95) June 9-10, 1995, Lubbock, Texas, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/cbms/1995/7117/00/71170292abs.htm">http://csdl.computer.org/comp/proceedings/cbms/1995/7117/00/71170292abs.htm</a>	
		SING BING KANG, et al., A Multibaseline Stereo System with Active Illumination and Real-Time Image Acquisition, Fifth International Conference on Computer Vision, June 20-23, 1995, Massachusetts Institute of Technology, Cambridge, Massachusetts, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/iccv/1995/7042/00/70420088abs.htm">http://csdl.computer.org/comp/proceedings/iccv/1995/7042/00/70420088abs.htm</a>	
		M. SHAND, Flexible Image Acquisition Using Reconfigurable Hardware, IEEE Symposium of FPGA's for Custom Computing Machines (FCCM '95), April 19-21, 1995, Napa Valley, California, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/fccm/1995/7086/00/70860125abs.htm">http://csdl.computer.org/comp/proceedings/fccm/1995/7086/00/70860125abs.htm</a>	
		DAECHUL PARK, et al., Lenticular Stereoscopic Imaging and Displaying Techniques with no Special Glasses, 1995 International Conference on Image Processing (Vol. 3)-Volume 3, October 23-26, 1995, Washington, D.C., Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icip/1995/7310/03/73103137abs.htm">http://csdl.computer.org/comp/proceedings/icip/1995/7310/03/73103137abs.htm</a>	
		H.H. GARNAOUI, et al., Visual Masking and the Design of Magnetic Resonance Image Acquisition, 1995 International Conference on Image Processing (Vol. 1)-Volume 1, October 23-26, 1995, Washington, D.C., Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icip/1995/7310/01/73100625abs.htm">http://csdl.computer.org/comp/proceedings/icip/1995/7310/01/73100625abs.htm</a>	
		JOHN DALTON, Digital Cameras and Electronic Color Image Acquisition, COMPCON Spring '96 - 41st IEEE International Conference, February 25-28, 1996, San Jose, California, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/compcon/1996/7414/00/74140431abs.htm">http://csdl.computer.org/comp/proceedings/compcon/1996/7414/00/74140431abs.htm</a>	
		ARUN KRISHMAN, Panoramic Image Acquisition, 1996 Conference on Computer Vision and Pattern Recognition (CVPR '96), June 18-20, 1996, San Francisco, CA, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/cvpr/1996/7258/00/72580379abs.htm">http://csdl.computer.org/comp/proceedings/cvpr/1996/7258/00/72580379abs.htm</a>	
		TONY S. JEBARA, 3D Pose Estimation and Normalization for Face Recognition, Department of Electrical Engineering, McGill University, A Thesis submitted to the Faculty of Graduate Studies and Research in Partial fulfillment of the requirements of the degree of Bachelor of Engineering, May 1996, pp. 1-121.	

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### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		DAVID BEYMER, Pose-Invariant Face Recognition Using Real and Virtual Views, Massachusetts Institute of Technology Artificial Intelligence Laboratory, A.I. Technical Report No. 1574, March 1996, pp. 1-176.	
		WEN-CHEN HU, et al., A Line String Image Representation for Image Storage and Retrieval, 1997 International Conference on Multimedia Computing and Systems (ICMCS '97), June 3-6, 1997, Ottawa, Ontario, Canada, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icmcs/1997/7819/00/78190434abs.htm">http://csdl.computer.org/comp/proceedings/icmcs/1997/7819/00/78190434abs.htm</a>	
		YUAN Y. TANG, et al., Information Acquisition and Storage of Forms in Document Processing, 4th International Conference Document Analysis and Recognition (ICDAR '97) Volume 1 and Volume II, August 18 - 20, 1997, Ulm, Germany, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icdar/1997/7898/00/78980170abs.htm">http://csdl.computer.org/comp/proceedings/icdar/1997/7898/00/78980170abs.htm</a>	
		J.-A. BERALDIN, et al., Object Model Creation from Multiple Range Images: Acquisition, Calibration, Model Building and Verification, International Conference on Recent Advances in 3-D Digital Imaging and Modeling, May 12-15, 1997, Ottawa, Ontario, Canada, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/nrc/1997/7943/00/79430326abs.htm">http://csdl.computer.org/comp/proceedings/nrc/1997/7943/00/79430326abs.htm</a>	
		JUN ZHANG, et al., Face Recognition: Eigenface, Elastic, Matching, and Neutral Nets, Proceedings of the IEEE, September 1997, pp. 1423-1435, Vol. 85, No. 9.	
		HIROYUKI AOKI, et al., An Image Storage System Using Complex-Valued Associative Memories, International Conference on Pattern Recognition (ICPR '00)-Volume 2, September 3-8, 2000, Barcelona, Spain, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icpr/2000/0750/02/07502626abs.htm">http://csdl.computer.org/comp/proceedings/icpr/2000/0750/02/07502626abs.htm</a>	
		DANIJEL SKOCAJ, Range Image Acquisition of Objects with Non-Uniform Albedo Using Structured Light Range Sensor, International Conference on Pattern Recognition (ICPR '00)-Volume 1, September 3-8, 2000, Barcelona, Spain, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/icpr/2000/0750/01/07501778abs.htm">http://csdl.computer.org/comp/proceedings/icpr/2000/0750/01/07501778abs.htm</a>	
		REINHOLD HUBER, et al., Adaptive Aperture Control for Image Acquisition, Sixth IEEE Workshop on Applications of Computer Vision, December 3-4, 2002, Orlando Florida, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/wacv/2002/1858/00/18580320abs.htm">http://csdl.computer.org/comp/proceedings/wacv/2002/1858/00/18580320abs.htm</a>	
		MICHAL KOZUBEK, et al., Automated Multi-view 3D Image Acquisition in Human Genome Research, 1st International Symposium on 3D Data Processing Visualization and Transmission (3DPVT '02), June 19-21, 2002, Padova, Italy, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/3dpvt/2002/1521/00/15210091abs.htm">http://csdl.computer.org/comp/proceedings/3dpvt/2002/1521/00/15210091abs.htm</a>	
		NOBUYUKI KITA, et al., Archiving Technology for Plant Inspection Images Captured by Mobile Active Cameras - 4D Visible Memory - 1st International Symposium on 3D Data Processing Visualization and Transmission (3DPVT '02), June 19-21, 2002, Padova, Italy, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/3dpvt/2002/1521/00/15210208abs.htm">http://csdl.computer.org/comp/proceedings/3dpvt/2002/1521/00/15210208abs.htm</a>	

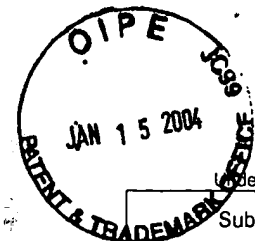
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		ANNA T. FERNANDEZ, et al., Synthetic Elevation Beamforming and Image Acquisition Capabilities Using an 8x 128 1.75D Array, The Technical Institute of Electrical and Electronics Engineers, Abstract printed from <a href="http://www.ieee-uffc.org/archive/uffc/trans/toc/abs/03/t0310040.htm">http://www.ieee-uffc.org/archive/uffc/trans/toc/abs/03/t0310040.htm</a>	
		HENRY A. ROWLEY, et al., Neutral Network-Based Face Detection, IEEE Transactions on Pattern Analysis and Machine Intelligence, January 1998, pp. 23-38, Vol. 20, No. 1.	
		MATHEW GAUBATZ, et al., Automatic Red-Eye Detection and Correction, IEEE ICIP, 2002, pages I-804 – I-807.	
		MING-HSUAN YANG, et al., Detecting Faces in Images: A Survey, IEEE Transactions on Pattern Analysis and Machine Intelligence, January 2002, pp. 34-58, Vol. 24, No. 1.	
		KRESIMIR MATKOVIC, et al., The 3D Wunderkammer an Indexing by Placing Approach to the Image Storage and Retrieval, Theory and Practice of Computer Graphics 2003, June 3-5, 2003, University of Birmingham, UK, Abstract printed from <a href="http://csdl.computer.org/comp/proceedings/tpcg/2003/1942/00/19420034abs.htm">http://csdl.computer.org/comp/proceedings/tpcg/2003/1942/00/19420034abs.htm</a>	
		Twins Crack Face Recognition Puzzle, Internet article <a href="http://www.cnn.com/2003/TECH/ptech/03/10/israel.twins.reut/index.html">http://www.cnn.com/2003/TECH/ptech/03/10/israel.twins.reut/index.html</a> , printed March 10, 2003, 3 pages.	

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